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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,480	12/26/2001	Toshihisa Terazawa	217349US3	7932
22850 7.	590 07/28/2004		EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET			WEINER, LAURA S	
	ALEXANDRIA, VA 22314		ART UNIT	PAPER NUMBER
	•		1745	
			D. TT / . H. T	

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/025,480	TERAZAWA ET AL.			
Office Action Summary	Examiner	Art Unit			
	Laura S Weiner	1745			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on <u>06 Ju</u>	1) Responsive to communication(s) filed on <u>06 July 2004</u> .				
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) Claim(s) 1-8 is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5)⊠ Claim(s) <u>1 and 2</u> is/are allowed.					
6)⊠ Claim(s) <u>3-8</u> is/are rejected.					
7) Claim(s) is/are objected to.	alant'a a an an Sananan				
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9)☐ The specification is objected to by the Examiner.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)☐ Some * c)☐ None of:					
1.⊠ Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)  1) Notice of References Cited (PTO-892)	4)	(DTO 442)			
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary ( Paper No(s)/Mail Da	te			
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 12-26-01.	5) Notice of Informal Pa	atent Application (PTO-152)			
S Patent and Trademark Office					

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#### **DETAILED ACTION**

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### Election/Restrictions

Applicant's election with traverse of Group I, claims 1-2 in the reply filed on
 7-6-04 is acknowledged. After further review, Group II, claims 3-8 was also considered.
 Therefore all claims were examined.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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3. Claims 3-4, 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by

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Inada et al. (JP 2000-331690, abstract).

Inada et al. teaches a separator for a fuel cell comprising heating and hardening of a compact by crushing and sieving mixture of 100 parts by weight of graphite powder and 15-30 parts by weight of a phenol resin; injection molding into a metallic mold [13-23 wt% of the phenol resin].

4. Claims 3-4, 6-7 are rejected under 35 U.S.C. 102(e) as being anticipated by

Saito et al. (US 2002/0028368).

Saito et al. teaches on page 2, [0019], a fuel cell separator comprising an electrically conductive carbon powder and a binding agent (which is a mixture of a thermoplastic resin and a carbodiimide compound), in which the separator has on one side or both sides thereof grooves, the process comprising injection-molding a mixture of 100 parts by mass of a thermoplastic resin, 0.001-50 parts by mass of a carbodiimide compound and 100-1000 parts by mass of thee electrically conductive carbon powder.

## Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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6. Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. (US 2002/0028368).

Saito et al. teaches on page 2, [0019], a fuel cell separator comprising an electrically conductive carbon powder and a binding agent (which is a mixture of a thermoplastic resin and a carbodiimide compound), in which the separator has on one side or both sides thereof grooves, the process comprising injection-molding a mixture of 100 parts by mass of a thermoplastic resin, 0.001-50 parts by mass of a carbodiimide compound and 100-1000 parts by mass of thee electrically conductive carbon powder.

In the event any differences can be shown for the product of the product by process claims 5 and 8, as opposed to the product taught by Saito et al., such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results. *In re Thrope 227 USPQ 964; (Fed. Cir. 1985)*.

With respect to the product by process claims 5 and 8, the determination of patentability is based upon the product itself not upon the method of its production. *In re Thrope 227 USPQ 964; In re Brown 173 USPQ 685; In re Bridgeford 149 USPQ 55; In re Wertheim 191 USPQ 90.* Any difference imparted by the product by process limitations would have been obvious to one having ordinary skill in the art at the time the invention was made because where the Examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to the Applicants to establish that their product is patentably distinct. *In re Brown 173 USPQ 685 and In re Fessmann 180 USPQ 324.* 

## Allowable Subject Matter

7. Claims 1-2 are allowed.

### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Saito et al. (6,242,124) teaches a separator for a polymer electrolyte fuel cell having in at least one side, a groove for supply of an oxidizing agent or a fuel gas in which the separator is made of a carbon composite material comprising 100 parts by weight of an expanded graphite powder and 10-45 parts by weight of a thermosetting resin dispersed in the expanded graphite powder [9.1-31 wt% of thermosetting resin].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura S Weiner whose telephone number is 571-272-1294. The examiner can normally be reached on M-F (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LBC) at 000-217-3137 (toll-lifee).

Laura S Weiner Primary Examiner Art Unit 1745 Page 6

July 26, 2004